I claim:

1. A transgenic plant resistant to the effects of externally imposed stresses, wherein the transgenic plant comprises a nucleotide sequence comprising an exogenous tonoplast pyrophosphate driven H+ pump gene operably linked to a promoter.

2. The transgenic plant of Claim 1, wherein the externally imposed stresses to which the plant is resistant are selected from the group consisting of drought, prolonged exposure to temperatures below O° C, and a growth medium high in salt content.

3. The transgenic plant of Claim 2, wherein the growth medium is selected form the group consisting of soil and water.

4. The transgenic plant of claim 1, wherein the exogenous tonoplast driven H+ pump gene encodes AVP1, or a homolog thereof.

5. The method of Claim 4, wherein the AVP1, or homolog thereof, is encoded by a gene present in a construct designed to overexpress AVP1, or homolog thereof.

6. The method of Claim 4, wherein the construct comprises the *AVP1* gene, or homologue thereof, operably linked to a chimeric promoter designed to overexpress AVP1.

7. The method of Claim 4, wherein the *AVP1* gene or homologue thereof is operably linked to a chimeric promoter selected from the group consisting of tissue specific promoters, constitutive promoters, inducible promoters and combinations thereof.

8. The method of Claim 4, wherein the *AVP1* gene is operably linked to a tissue-specific promoter that promotes expression of AVP1 in pollen.

9. The method of Claim 4, wherein the *AVP1* gene, or homolog thereof, is operably linked to a double tandem enhancer of a 35S CaMV promoter.

10. The method of Claim 4, wherein the *AVP1* gene, or homolog thereof, is derived from a wild type plant.

11. The method of Claim 4, wherein the AVP1, or homolog thereof, is derived from a transgenic plant.

12. A seed produced by the transgenic plant of Claim 1.

13. A progeny plant from the seed of Claim 12.

14. A transgenic plant obtained by introducing into the genome of the plant exogenous nucleic acid that alters expression of vacuolar pyrophosphatase in the transgenic plant.

15. Plant cells comprising exogenous nucleic acid that alters expression of vacuolar pyrophosphatase in the plant cell.

16. The plant cells of Claim 15, wherein the cells are selected from the group consisting of root cells and stem cells.

17. The plant cells of Claim 15, wherein the exogenous nucleic acid encodes AVP1.

18. The plant cells of Claim 17, wherein the AVP1 is derived from a wild type plant of the same species from which the transgenic plant is derived.

19. The plant cells of Claim 17, wherein the AVP1 is derived from a wild type plant of a different species from which the transgenic plant is derived.

20. A method for increasing production of seeds in plants comprising the steps of:

(a) providing pollen from a first plant, wherein said first plant has been transformed with a tonoplast pyrophosphate driven H+ pump gene operably linked to a promoter to create a transgenic plant;

(b) fertilizing a second plant of the same species from which the first plant is derived with the pollen from the transgenic plant; and

(c) culturing the fertilized plant until the plant produces mature seeds.

21. The method of Claim 20, wherein the tonoplast pyrophosphatase driven H+ pump gene transformed into the first plant is exogenous.

22. The method of Claim 20, wherein the second plant is a transgenic plant.

23. The method of Claim 20, wherein the second plant is a wild type plant.

24. The method of Claim 21, wherein said exogenous tonoplast pyrophosphate driven H+ pump gene is operably linked to a chimeric promoter.

25. The method of claim 24, wherein said exogenous tonoplast pyrophosphate driven H+ pump gene encodes AVP1.

26. A plant seed produced by the method of claim 21.

27. A progeny plant grown from the plant seed of claim 26.

28. The method of claim 22, wherein the first and second plants are from the species *A. thaliana*.

29. The method of claim 22, wherein the first and second plants are from the species N*icotinia tabacum*.

30. The method of claim 22, wherein the second plant has been transformed with a polynucleotide sequence comprising an exogenous tonoplast pyrophosphatase driven H+ pump gene operably linked to a promoter.

31. A plant seed produced by the method of claim 22.

32. A progeny plant grown from the plant seed of claim 31.